REPORT NO. 77-3-26

FOREST INSECT AND DISEASE MANAGEMENT UNIT
U.S. FOREST SERVICE
DORAVILLE, GEORGIA

## REPORT OF AERIAL DETECTION SURVEY

LAND OWNERSHIP OR SURVEY AREA: Nantahala National Forest

STATE: North Carolina

AREA WITHIN SURVEY BOUNDARY: 500,000 acres DATE: 6/2-3/77

PERCENT COVERAGE: 50% AIRCARFT: Cessna 182 CREW: C. W. Dull
P. A. Mistretta
R. F. Bassett

SURVEY OBJECTIVES: To detect and delineate areas of defoliation caused by the fall cankerworm, *Alsophila pometaria* (Harris).

## SURVEY RESULTS

Seven separate areas of heavy defoliation (75-100%) were observed on the current survey. Most of the defoliation occurred in the Nantahala Mountains southeast of Nantahala Lake (see map attached). However several smaller defoliated areas were found in the Cheoah Mountains. An estimated 15,000 acres of heavy defoliation were observed on the Nantahala National Forest.

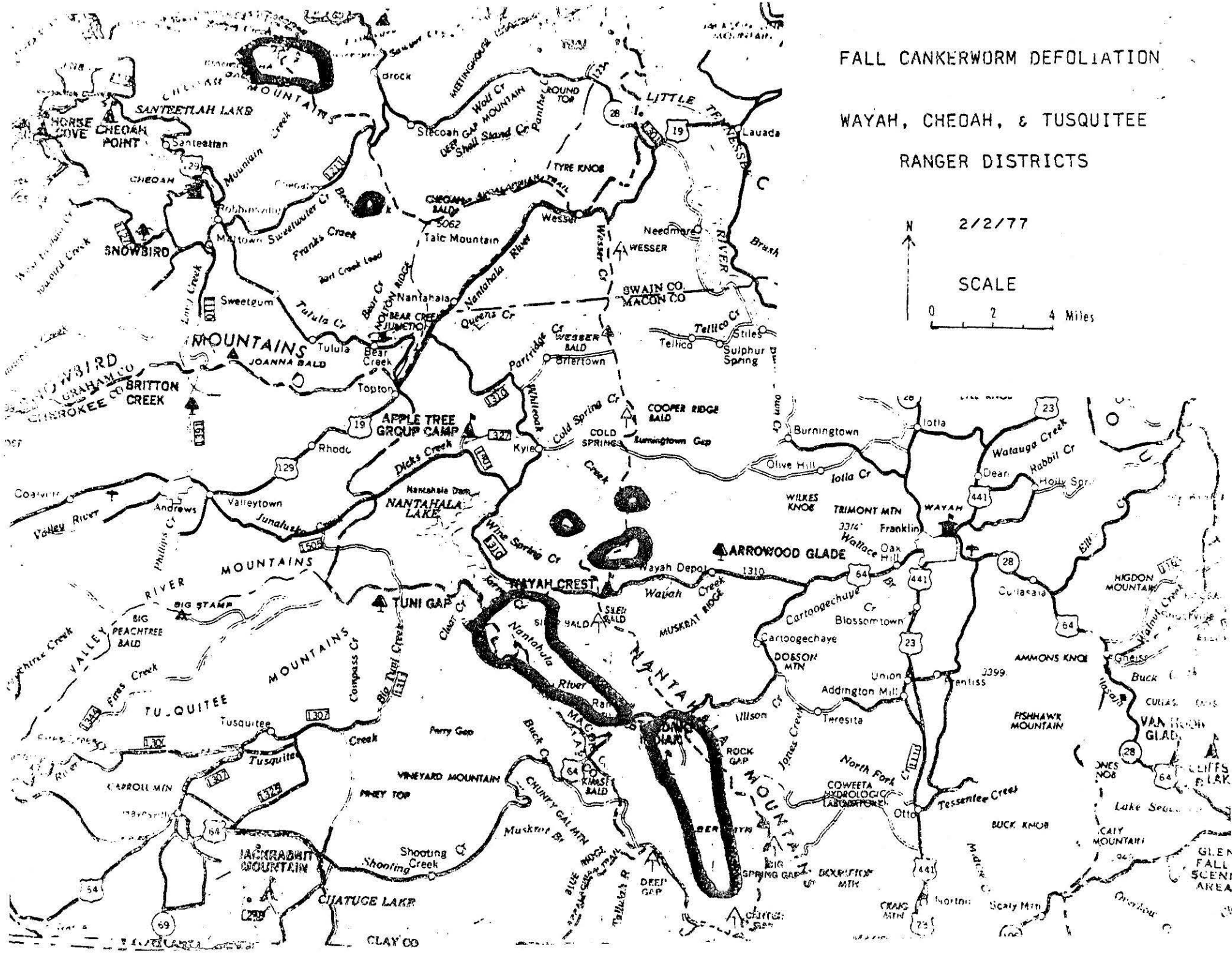
Ground checking of several areas showed fall cankerworm as the causal agent. Larval development was completed except for a few scattered larvae. Predators (*Calosoma* sp. beetles) and larval parasites were numerous.

Most of the attacked trees were beginning to refoliate. Little tree mortality was observed.

## CONCLUSIONS

The fall cankerworm is causing heavy defoliation of hardwoods on the Nantahala National Forest. This insect is a serious pest which can cause timber mortality after several successive years of defoliation and it is a nuisance to hikers and campers. Cankerworm populations in this area are being monitored by the Asheville Office of Forest Pest Management to determine impact to the forest resources.

For any additional information, Contact:
Forest Insect and Disease Management Unit
Southeastern Area, State & Private Forestry
Northgate Office Park, Room 2103
3620 Interstate 85, N.E.
Doraville, Georgia 30340
Telephone 404-221-4796


FALL CANKERWORM DEFOLIATION
WAYAH, CHEOAH, & TUSQUITEE
RANGER DISTRICTS
N
2/2/77
SCALE
0 2 4 Miles
SNOWBIRD MOUNTAINS
NANTAHALA MOUNTAINS
VALLEY RIVER MOUNTAINS
TUSQUITEE MOUNTAINS
SANTEETLAH LAKE
NANTAHALA LAKE
CHATUGE LAKE
HORSE COVE
CHEOAH POINT
SNOWBIRD
BRITTON CREEK
APPLE TREE GROUP CAMP
TUNI GAP
WAYAH CREST
ARROWOOD GLADE
WESSER
SWAIN CO.
MACON CO
CHEROKEE CO
GRAHAM CO
CLAY CO
JACKRABBIT MOUNTAIN
COOPER RIDGE BALD
JOANNA BALD
BIG STAMP
BIG PEACHTREE BALD
SILER BALD
KILLIAN BALD
WESSER BALD
CHEOAH BALD
5062
Taic Mountain
TYRE KNOB
ROUND TOP
Panthertail Ck
Shell Stand Cr
Wolf Cr
MEETINGHOUSE
Stecoah Gap
Stecoah
Lauada
LITTLE TENNESSEE RIVER
Needmore
Wesser
Wesser Ck
Nantahala River
Nantahala
Bear Ck
NORTON RIDGE
BEAR CREEK JUNCTION
Tulula
Tulula Cr
Sweetgum
Lonz Creek
Robbinsville
Snowbird Creek
Franks Creek
Bird Creek Road
Sweetwater Cr
Meltown
Cheoah
Cheoah River
Tellico
Tellico Ck
Stiles
Sulphur Spring
Partridge Cr
Whitecap
Brittertown
Topton
Bear Creek
Rhodo
Kyle
Cold Spring Cr
COLD SPRING
Burningtown Gap
Burningtown
Olive Hill
Iotla
Iotla Cr
Dicks Creek
Nantahala Dam
Coalmine
Andrews
Valleytown
Valley River
Phillips Cr
Junaluska Creek
Wine Spring Cr
Wayah Depot
1310
Wayah Creek
MUSKRAT RIDGE
Cartoogechaye
Cartoogechaye Cr
Blossomtown
DOBSON MTN
Union
Addington Mill
Teresita
Allison Cr
Jones Creek
Franklin
TRIMONT MTN
3374'
WILKES KNOB
Oak Hill
Wallace Br
Ellijay
Watauga Creek
Rabbit Cr
Dean
Holly Spr
WAYAH
Cullasaja
HIGDON MOUNTAIN
Walnut Creek
AMMONS KNOB
3399
Buck
FISHHAWK MOUNTAIN
VAN HOOK GLADE
Tessentee Creek
BUCK KNOB
Lake Sequ
CAIY MOUNTAIN
GLEN FALLS SCENIC AREA
Scaly Mtn
Norton
Overlook
North Fork Ck
COWEETA HYDROLOGIC LABORATORY
Otto
ROCK GAP
Parry Gap
Buck Ck
Compass Cr
Big Duel Creek
Fires Creek
Tusquitee
Tusquitee Creek
VINEYARD MOUNTAIN
PINEY TOP
CHUNKY GAL MTN
Muskrat Br
Shooting Creek
BLUE RIDGE
DEEP GAP
Tallulah R
Clarks
CRAG MTN
BIG SPRING GAP
BOOGERTOP MTN
CARROLL MTN
Cheoah Creek
Cheoah Mountain
Cheoah Bald Trail
Deep Shell Stand Cr
Meetinghouse
Wolf Cr
Panthertail Ck
Round Top
Tyre Knob
Cheoah Bald
Taic Mountain
Wesser Bald
Cooper Ridge Bald
Joanna Bald
Big Stamp
Big Peachtree Bald
Siler Bald
Killian Bald
Rock Gap
Parry Gap
Vineyard Mountain
Piney Top
Chunky Gal Mtn
Jackrabbit Mountain
Chatuge Lake
Fishhawk Mountain
Ammons Knob
Buck Knob
Trimont Mtn
Wilkes Knob
Higdon Mountain
Craig Mtn
Big Spring Gap
Boogertop Mtn
Deep Gap
Blue Ridge
Norton Ridge
Bear Creek Junction
Nantahala Lake
Wayah Crest
Arrowood Glade
Cooper Ridge Bald
Cold Spring Gap
Burningtown Gap
Nantahala Dam
Nantahala River
Valley River
Tuni Gap
Wayah Bald
Siler Bald
Killian Bald
Wesser Bald
Cheoah Bald
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